

Rabbit CHUK Polyclonal Antibody | anti-CHUK antibody

CHUK Antibody (N-term)

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA289249	Rabbit	Human (Predicted Reactivity: Bovine, Chicken, Mouse)	ELISA, Western Blot

PRODUCT SYNONYMS

CHUK; Polyclonal Antibody; CHUK Antibody (N-term); Inhibitor of nuclear factor kappa-B kinase subunit alpha; I-kappa-B kinase alpha; IKK-A; IKK-alpha; IkBKA; IkappaB kinase; Conserved helix-loop-helix ubiquitous kinase; I-kappa-B kinase 1; IKK1; Nuclear factor NF-kappa-B inhibitor kinase alpha; NFKBIKA; Transcription factor 16; TCF-16; IKKA; TCF16; anti-CHUK antibody

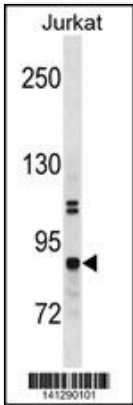
PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human (Predicted Reactivity: Bovine, Chicken, Mouse)
Clonality	Polyclonal
Isotype	Rabbit Ig
Specificity	This CHUK antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 84-112 amino acids from the N-terminal region of human CHUK.
Purity/Purification	Peptide Affinity Purified Rabbit Polyclonal Antibody (Pab)
Form/Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Concentration	Vial Concentration: 0.5 (varies by lot)
Sequence Positions	84-112
Sequence Length	745
Applicable Applications for anti-CHUK antibody	ELISA, WB (Western Blot)
Function	Serine kinase that plays an essential role in the NF- kappa-B signaling pathway which is activated by multiple stimuli such as inflammatory cytokines, bacterial or viral products, DNA damages or other cellular stresses. Acts as part of the canonical IKK complex in the conventional pathway of NF-kappa-B activation and phosphorylates inhibitors of NF-kappa-B on serine residues. These modifications allow polyubiquitination of the inhibitors and subsequent degradation by the proteasome. In turn, free NF-kappa-B is translocated into the nucleus and activates the transcription of hundreds of genes involved in immune response, growth control, or protection against apoptosis. Negatively regulates the pathway by phosphorylating the scaffold protein TAXBP1 and thus promoting the assembly of the A20/TNFAIP3 ubiquitin-editing complex (composed of A20/TNFAIP3, TAX1BP1, and the E3 ligases ITCH and RNF11). Therefore, CHUK plays a key role in the negative feedback of NF-kappa-B canonical signaling to limit inflammatory gene activation. As part of the non-canonical pathway of NF-kappa-B activation, the MAP3K14-activated CHUK/IKKA homodimer phosphorylates NFKB2/p100 associated with RelB, inducing its proteolytic processing to NFKB2/p52 and the formation of NF-kappa- B RelB-p52 complexes. In turn, these complexes regulate genes encoding molecules involved in B-cell survival and lymphoid organogenesis. Participates also in the negative feedback of the non -canonicalNF-kappa-B signaling pathway by phosphorylating and destabilizing MAP3K14/NIK. Within the nucleus, phosphorylates CREBBP and consequently increases both its transcriptional and histone acetyltransferase activities. Modulates chromatin accessibility at NF-kappa-B-responsive promoters by phosphorylating histones H3 at 'Ser-10' that are subsequently acetylated at 'Lys-14' by CREBBP. Additionally, phosphorylates the CREBBP-interacting protein NCOA3.
Cellular Location	Cytoplasm. Nucleus. Note=Shuttles between the cytoplasm and the nucleus
Tissue Location	Widely expressed.

Preparation and Storage

Maintain refrigerated at 2-8 degree C for up to 2 weeks. For long term storage store at -20 degree C in small aliquots to prevent freeze-thaw cycles.

IMAGES



WB (Western Blot)
CHUK Antibody (N-term) western blot analysis in Jurkat cell line lysates (35ug/lane). This demonstrates the CHUK antibody detected the CHUK protein (arrow).

ADDITIONAL INFORMATION

Related Product Information for anti-CHUK antibody	This gene encodes a member of the serine/threonine protein kinase family. The encoded protein, a component of a cytokine-activated protein complex that is an inhibitor of the essential transcription factor NF-kappa-B complex, phosphorylates sites that trigger the degradation of the inhibitor via the ubiquination pathway, thereby activating the transcription factor.
Product Categories/Family for anti-CHUK antibody	Cardiovascular; Cell Biology; Immunology; Signal Transduction
References	Lahtela, J., et al. N. Engl. J. Med. 363(17):1631-1637(2010) Gouin, E., et al. Proc. Natl. Acad. Sci. U.S.A. 107(40):17333-17338(2010) Cummins, E.P., et al. J. Immunol. 185(7):4439-4445(2010) Li, T., et al. Nat. Immunol. 11(9):799-805(2010) Rotman, Y., et al. Hepatology 52(3):894-903(2010)

NCBI AND UNIPROT INFORMATION

NCBI GI #	62241001
NCBI GeneID	1147
NCBI Accession #	NP_001269.3
NCBI GenBank Nucleotide #	NM_001278.3
UniProt Accession #	O15111; O14666; Q13132; Q5W0I4; Q92467
Molecular Weight	84640
NCBI Official Full Name	inhibitor of nuclear factor kappa-B kinase subunit alpha
NCBI Official Synonym Full Names	conserved helix-loop-helix ubiquitous kinase
NCBI Official Symbol	CHUK
NCBI Official Synonym Symbols	IKK1; IKKA; IKBKA; TCF16; NFKBIKA; IKK-alpha
NCBI Protein Information	inhibitor of nuclear factor kappa-B kinase subunit alpha

UniProt Protein Name	Inhibitor of nuclear factor kappa-B kinase subunit alpha
UniProt Gene Name	CHUK
UniProt Synonym Gene Names	IKKA; TCF16; I-kappa-B kinase alpha; IKK-A; IKK-alpha; IkbKA; IkappaB kinase; IKK1; NFKB1A; TCF-16
UniProt Entry Name	IKKA_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://www.aaabiotech.com/polyclonal/chuk-antibody-western-blot-elisa/289249>